

RELAY: RLY1 BYPASS

PIN	CONTACT	FROM	TO	SIGNAL	SHEETS
A	COIL-A	RLY8-4	RLY2-A	+24V	6
B	COIL-B	-	RLY2-B	BYPASS CONTROL SIGNAL	6
1	NC-1	-	RLY12-7	MOT1	4
2	NC-2	-	RLY7-9	MOT2	4
3	NC-3	-	J405-2	+5V	6
4	NO-1	RLY3-7	RLY7-7	GND	4
5	NO-2	-	RLY1-6	+15V	4
6	NO-3	RLY1-5	TB2-1	+15V	6
7	COM-1	J404-A	-	MOT1	4
8	COM-2	RLY11-1	-	MOT2	4
9	COM-3	J406-4	-	-	6

RELAY: RLY2 BP PWR

PIN	CONTACT	FROM	TO	SIGNAL	SHEETS
A	COIL-A	RLY1-A	TB1-1	+24V	6
B	COIL-B	RLY1-B	RLY3-5	BYPASS CONTROL SIGNAL	6
1	NC-1	-	-	-	-
2	NC-2	-	-	-	-
3	NC-3	J405-19	-	+5V	6
4	NO-1	AC FUSE	-	AC-H	6
5	NO-2	15V PS AC-N	-	-	6
6	NO-3	-	-	+15V	6
7	COM-1	-	TB3-1	AC-H	6
8	COM-2	-	TB3-2	AC-N	6
9	COM-3	-	J406-4	V_LIMIT	-

RELAY: RLY3 BP CTRL

PIN	CONTACT	FROM	TO	SIGNAL	SHEETS
A	COIL-A	-	SW1-2A	RESET	6
B	COIL-B	-	RLY3-4	BYPASS SWITCH	6
1	NC-1	-	-	-	-
2	NC-2	-	-	-	-
3	NC-3	J404-16	-	-	7
4	NO-1	RLY3-B	SW2-4	BYPASS SWITCH	6
5	NO-2	RLY2-B	-	BYPASS CONTROL SIGNAL	6
6	NO-3	-	-	-	-
7	COM-1	RLY1-4	RLY3-8	GND	6
8	COM-2	RLY3-7	RLY4-7	GND	6
9	COM-3	RLY10-9	RLY4-9	GND	7

RELAY: RLY4 STOP

PIN	CONTACT	FROM	TO	SIGNAL	SHEETS
A	COIL-A	-	SW1-2B	RESET	6
B	COIL-B	RLY10-4	RLY4-4	EMERGENCY STOP	6
1	NC-1	-	-	-	-
2	NC-2	RLY10-8	-	MOT2	4
3	NC-3	J405-5	-	-	7
4	NO-1	RLY4-B	SW3-4	EMERGENCY STOP	6
5	NO-2	-	-	-	-
6	NO-3	-	-	LED3	7
7	COM-1	RLY3-8	RLY5-B	GND	6
8	COM-2	RLY3-7	RLY11-7	GND	4
9	COM-3	RLY3-9	RLY5-8	GND	7

RELAY: RLY5 1RET

PIN	CONTACT	FROM	TO	SIGNAL	SHEETS
A	COIL-A	-	RLYBRD J2-3	1RET-DRV	3
B	COIL-B	RLY4-7	RLY6-B	GND	3
1	NC-1	-	-	-	-
2	NC-2	LED J1-7	-	LED7	7
3	NC-3	J405-10	-	1RET TO GALIL	7
4	NO-1	J202-C	-	DEPLOY_B	2
5	NO-2	-	-	-	-
6	NO-3	-	-	-	-
7	COM-1	-	RLY8-A	MDPL_OUT	2
8	COM-2	RLY4-9	RLY5-9	GND	7
9	COM-3	RLY5-8	RLY6-8	GND	7

RELAY: RLY6 1DPL

PIN	CONTACT	FROM	TO	SIGNAL	SHEETS
A	COIL-A	-	RLYBRD J2-4	1DPL_DRV	3
B	COIL-B	RLY5-B	TB1-5	GND	3
1	NC-1	-	-	-	-
2	NC-2	LED J1-5	-	LED5	7
3	NC-3	J405-11	-	1DPL TO GALIL	7
4	NO-1	-	RLY9-A	RETRACT+	2
5	NO-2	-	-	-	-
6	NO-3	-	-	-	-
7	COM-1	J202-D	-	RETRACT_A	2
8	COM-2	RLY5-9	RLY6-9	GND	7
9	COM-3	RLY6-8	TB1-4	GND	7

RELAY: RLY7 LOCAL

PIN	CONTACT	FROM	TO	SIGNAL	SHEETS
A	COIL-A	J202-G	-	LOCAL/REMOTE	2, 5
B	COIL-B	-	RLY8-1	GND	2, 5
1	NC-1	J405-15	-	LOCAL/REMOTE (TO GALIL)	5, 7
2	NC-2	-	J403-A	MOT1-IN	5
3	NC-3	-	J403-B	MOT2-IN	5
4	NO-1	-	LED-A	FRONT PANEL LOCAL LED9	5, 7
5	NO-2	-	RLY8-7	MANUAL DEPLOY	5
6	NO-3	-	RLY9-7	MANUAL RETRACT	5
7	COM-1	RLY1-4	-	GND	5, 7
8	COM-2	RLY12-1	-	MOT1	5
9	COM-3	RLY1-2	-	MOT2	5

RELAY: RLY8 MDPL

PIN	CONTACT	FROM	TO	SIGNAL	SHEETS
A	COIL-A	RLY5-7	-	MDEPLOY+	2
B	COIL-B	J202-B	-	DEPLOY_A	2
1	NC-1	RLY7-B	RLY9-1	GND	5
2	NC-2	-	-	-	-
3	NC-3	-	-	-	-
4	NO-1	RLY9-4	RLY1-A	+24V	5
5	NO-2	-	-	-	-
6	NO-3	-	-	-	-
7	COM-1	RLY7-5	-	MANUAL DEPLOY	5
8	COM-2	-	-	-	-
9	COM-3	-	-	-	-

RELAY: RLY9 MRET

PIN	CONTACT	FROM	TO	SIGNAL	SHEETS
A	COIL-A	RLY6-1	-	MRETRACT+	2
B	COIL-B	J202-E	-	RETRACT_B	2
1	NC-1	RLY8-1	RLY10-7	GND	5
2	NC-2	-	-	-	-
3	NC-3	-	-	-	-
4	NO-1	-	RLY8-4	+24V	5
5	NO-2	-	-	-	-
6	NO-3	-	-	-	-
7	COM-1	RLY7-6	-	MANUAL RETRACT	5
8	COM-2	-	-	-	-
9	COM-3	-	-	-	-

RELAY: RLY10 E-STOP

PIN	CONTACT	FROM	TO	SIGNAL	SHEETS
A	COIL-A	J201-A	-	OBSERVATORY E-STOP (AC)	6
B	COIL-B	J202-B	-	OBSERVATORY E-STOP (AC)	6
1	NC-1	J406-8	RLY4-B	E-STOP	6
2	NC-2	-	-	-	-
3	NC-3	-	-	LED4	7
4	NO-1	-	-	-	-
5	NO-2	J404-B	-	MOT2	4
6	NO-3	J405-13	-	-	7
7	COM-1	RLY9-1	RLY11-B	GND	6
8	COM-2	-	RLY4-2	MOT2	4
9	COM-3	RLY11-8	RLY3-9	GND	7

RELAY: RLY11 2RET

PIN	CONTACT	FROM	TO	SIGNAL	SHEETS
A	COIL-A	-	RLYBRD J2-1	3RET_DRV	3
B	COIL-B	RLY10-7	-	GND	3
1	NC-1	-	-	-	-
2	NC-2	LED J1-8	-	LED8	7
3	NC-3	J405-6	-	2RET TO GALIL	7
4	NO-1	-	RLY1-8	MOT2	4
5	NO-2	-	-	-	-
6	NO-3	-	-	-	-
7	COM-1	RLY4-8	-	MOT2	4
8	COM-2	RLY11-9	RLY10-9	GND	7
9	COM-3	RLY12-8	RLY11-8	GND	7

RELAY: RLY12 2DPL

PIN	CONTACT	FROM	TO	SIGNAL	SHEETS
A	COIL-A	-	RLYBRD J2-2	2DPL_DRV	3
B	COIL-B	RLY11-B	TB1-6	-	3
1	NC-1	-	-	-	-
2	NC-2	LED J1-6	-	LED6	7
3	NC-3	J405-7	-	2DPL TO GALIL	7
4	NO-1	-	RLY7-8	MOT1	4
5	NO-2	-	-	-	-
6	NO-3	-	-	-	-
7	COM-1	RLY1-1	-	MOT1	4
8	COM-2	RLY12-9	RLY11-9	GND	7
9	COM-3	-	RLY12-8	GND	7

REVISION
10-12-04 ADDED DETAILS
10-25-04 CORRECTED RLY2-3, RLY10-3, RLY11-3, AND RLY12-3 'FROM' LABELS
12-21-04 CHANGED FROM NO CONTACTS TO NC FOR STAGE LIMIT RELAY LED CONNECTIONS
01-05-05 SWAPPED LIMIT SENSE FOR BYPASS MODE AND MANUAL MODE TO MAKE CONNECTIONS
02-22-07 SWAPPED RELAY 10 CONTACTS FOR CORRECT SENSE. G. TOLLETH
03-12-07 CORRECTED LABELS FOR LOCAL/REMOTE AT RELAY 7

UNIVERSITY OF CALIFORNIA LICK OBSERVATORY		KECK ADC LIMIT INTERLOCK	
DES'N BY: B. Alcott	ORIGIN DATE: 10-03-03	DWG. NO.	NUM. 8 OF 8
Last SN	MODIFY DATE: 03-12-07	EL-3612	
PRINT TIME: 15:10:29	PRINT DATE: Mon Mar 12, 2007	REV. B	
PATH: ADC\		ADC_interlock.sch	